

## PATENT COOPERATION TREATY

## PCT

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

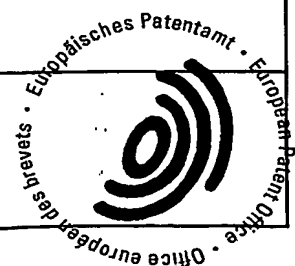
(PCT Article 36 and Rule 70)

(Rationalised Report according to the Notice of the President of the EPO published in the OJ11/2001)

Applicant's or agent's file reference <b>100835-1 WO</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/GB03/04217</b>	International filing date (day/month/year) <b>29/09/2003</b>	Priority date (day/month/year) <b>03/10/2002</b>
International Patent Classification (IPC) or national classification and IPC <b>C07D495/04</b>		
Applicant <b>ASTRAZENECA AB et al.</b>		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This <b>REPORT</b> consists of a total of <u>2</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consists of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>

Date of submission of the demand <b>21/04/2004</b>	Date of completion of this report <b>03/08/2004</b>
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**I. Basis of the report**

The basis of this international preliminary examination is the application as originally filed.

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability**

In light of the documents cited in the international search report, it is considered that the invention as defined in at least some of the claims does not appear to meet the criteria mentioned in Article 33(1) PCT, i.e. does not appear to be novel and/or to involve an inventive step (see international search report, in particular the documents cited X and/or Y and corresponding claim references).

## INTERNATIONAL SEARCH REPORT

Int lional Application No

PCT/GB 03/04217

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07D495/04 C07D333/36 //(C07D495/04,333:00,209:00)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BEILSTEIN Data, CHEM ABS Data, EP0-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>YOSHINORI NAKAMURA: "Construction of heterocyclic compounds by use of alpha-diazaphosphonates: new one-pot syntheses of indoles and isocoumarines" ORGANIC LETTERS., vol. 4, no. 14, 2002, pages 2317-20, XP002266825 ACS, WASHINGTON, DC., US ISSN: 1523-7060 table 1</p> <p>--- -/--</p>	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 January 2004

Date of mailing of the international search report

13/02/2004

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## INTERNATIONAL SEARCH REPORT

Int ional Application No

PCT/GB 03/04217

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SHVEDOV, V. I. ET AL: "2-Aminothieno'2,3-b!pyridine derivatives" retrieved from STN Database accession no. 78:159580 XP002266826 compound with RN = 41405-96-3 & SU 364 613 T (ORDZHONIKIDZE, S., ALL-UNION SCIENTIFIC-RESEARCH CHEMICAL-PHARMACEUTIC) 28 December 1972 (1972-12-28) ---	7
X	WO 01 28993 A (MERCK & CO INC) 26 April 2001 (2001-04-26) page 75 (10-3) ---	7
X	SUGIYAMA, MITSUO ET AL: "Condensed thienopyrimidines. IV. Synthesis and gastric antisecretory activity of 2,3-dihydro-5H-oxazolothienopyrimidine derivatives" CHEMICAL & PHARMACEUTICAL BULLETIN (1989), 37(10), 2717-22 , XP002267346 table III, compounds 4a-4d ---	7
X	SUGIYAMA, MITSUO ET AL: "Condensed thienopyrimidines. 5. Studies on the thermal cyclization of various ortho-formylthiophenecarbamates with ethanolamine" HETEROCYCLES (1989), 29(7), 1317-23 , XP008026471 table 1, compounds 1i,1j ---	7
X	METH-COHN, OTTO ET AL: "The preparation and formylation of 2-acetamidothiophenes" SYNTHESIS (1980), (2), 133-5 , XP002267347 table 2, compounds 3b,3f -----	7

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/04217

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
SU 364613	T	NONE	
WO 0128993	A	26-04-2001	
		AU 1091301 A	30-04-2001
		CA 2387840 A1	26-04-2001
		EP 1226119 A2	31-07-2002
		JP 2003512353 T	02-04-2003
		WO 0128993 A2	26-04-2001
		US 6479512 B1	12-11-2002